#### RANGELAND HEALTH STANDARDS - ASSESSMENT – HICKEY FRF # 223

There is 851 acres in the Hickey FRF Allotment, of which 412 acres are public land and 439 acres are private land. The entire allotment will be assessed because it is managed as a single pasture and the ESI inventory provided data for both private and public lands.

#### STANDARD 1 - UPLAND WATERSHED

The indicators used to evaluate this standard are Soil Surface Factor (SSF), which documents accelerated erosion; and plant community composition, which indicates root occupancy of the soil profile.

## This standard is being met on the allotment.

Soil Surface Factor (SSF) is an indicator of accelerated erosion and is a method of documenting observations regarding erosion. Of the 851 acres in the Hickey FRF Allotment, 661 (78%) have an SSF rating of Moderate and 20 acres (2%) are rated as Slight. There is one acre rated as Stable and 169 acres are unknown. The area rated as Moderate contained some evidence of surface erosion but no rill or gullies. A tour of the allotment by an interdisciplinary team in May of 2002 found most of grazing impacts were on private land with some small areas of grazing use on public land. There was no evidence of accelerated erosion caused by grazing on public land. A copy of the form used to document SSF is attached (Appendix A, "Determination of Erosion Condition Class").

Another indicator of Upland Watershed condition is plant composition and community structure. Current plant composition is compared to a defined Potential Natural Plant Community for the identified soil type and precipitation zone. Using the 1988 Ecological Site Inventory, the percent of the allotment in each seral stage is summarized in the table below. Most of the allotment is in the Mid seral (80%) with one acre in Late Seral stage and 20% (169 acres) unknown.

Seral Stage	Percent comparability to Potential Natural Community	Percent of allotment in seral stage
Early	0-25%	0
Mid	26-50%	80% (681 acres)
Late	51-75%	0.1% (1 acre)
Rockland		0
Unknown*		20% (169 acres)

<sup>\*</sup> The unknown acres are the inclusions within a vegetation community that include transition areas and plant communities too small to be mapped separately.

#### STANDARD 2 - RIPARIAN/WETLAND

Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate and landform.

**Standard two is being met for Riparian/Wetland function.** The two acres of wetlands found in the allotment are currently at Proper Functioning Condition (PFC). Livestock grazing does not appear to be impacting these areas.

#### STANDARD 3 - ECOLOGICAL PROCESSES

Healthy, productive and diverse plant and animal populations and communities appropriate to soil, climate and landform are supported by ecological processes of nutrient cycling, energy flow and the hydrologic cycle.

#### This standard is being met.

The Observed Apparent Trend (Appendix B) was determined during ESI and it was static on 80% (681 acres) of the allotment, upward on one acre and unknown on 20% (169 acres).

There are no trend studies on the allotment. The one utilization study in 1991 showed a pattern of use, similar to the pattern seen on the tour in May, 2002. The use was light (30%-50%) to moderate on most of the public land and the heavy use was mostly restricted to the private land in the meadow and near the water sources.

Standard three is being met for animal populations. The allotment is supporting the current and proposed number of mule deer and pronghorn antelope identified by Oregon Department of Fish and Wildlife (ODFW) management plans.

Noxious weeds are known to occur in the allotment. The uplands are essentially weed free at present but the private meadows have significant infestations, particularly of Canada thistle. There is potential over the years for the weeds in the meadows to move out on to the moister portions of the BLM lands.

#### STANDARD 4 - WATER QUALITY STANDARDS

Surface and groundwater quality, influenced by agency actions, complies with State water quality standards.

This standard is not applicable to this allotment since there are no 303d listed water bodies within the allotment.

STANDARD 5 - NATIVE, T&E, and LOCALLY IMPORTANT SPECIES Habitats support healthy, productive and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate and landform.

#### Standard 5 is being met for native, T&E, and locally important wildlife species.

There are no known sage grouse leks within the allotment, but there are three identified sage grouse leks and nesting habitat within the surrounding allotments. Sage grouse have been seen using the allotment at different times of the year but the forage habitat present is not being impacted by livestock grazing. Peregrine falcons have been seen within the allotment, probably from releases from the Crump Lake hack site, however, no nesting occurs within the area. Bald eagles use the area in the winter, feeding off dead waterfowl and other carrion.

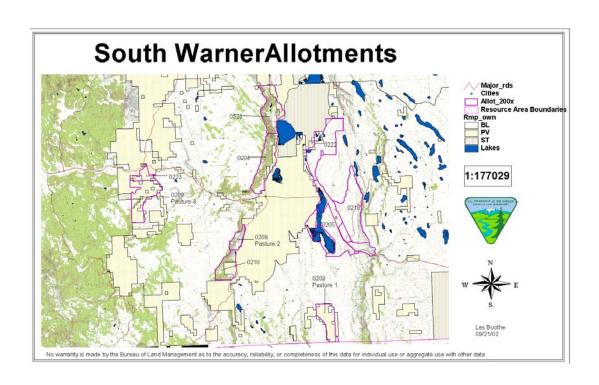
No Special Status plants have been found and none are suspected.

## **Current Management and Recent Management Changes**

The current management is to graze this allotment in conjunction with the private land meadow areas known as Crane Lake.

<b>Team Members</b>	<u>Title</u>				
Les Boothe	Range Management Specialist				
Alan Munhall	Fishery Biologist				
Vern Stofleth	Wildlife Biologist				
Lucile Housley	Botantist				
Bill Cannon	Archaeologist				
Ken Kestner	Supervisory NRS				
Robert Hopper	Supervisory RMS				
Erin McConnell	Weed Management Specialist				
<b>Determination</b>					
FRF Allotment prop Standards for Range	Existing grazing management practices or levels of grazing use on the Hickey FRF Allotment promote achievement of significant progress towards the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.				
FRF Allotment will season to promote a	Existing grazing management practices or levels of grazing use on the Hickey FRF Allotment will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.				
Acting Area Manager, Lake	eview Resource Area	Date			

**Hickey FRF0223** Hidkey FRF 0223 Allotment 0209 2 Miles Cities Allot\_200x Resource Area Boundaries Rmp\_own BL Р٧ ST No warranty is made by the Bureau of Land Management Les Boothe Lakes as to the accuracy reliability or completeness of this



# Appendix A.

# DETERMINATION OF EROSION CONDITION CLASS Soil Surface Factors

1				Don Buriace	7 1 40:015	T	
SOIL MOVEMENT	No visable evidence of movement		Some Movement of soils particles	Moderate Movement of soil is visable and recent Slight terracing generally less than 1" in height 6 7 8	Occurs with each event. Soil and Debris deposited against minor obstructions	Subsoil have em dunes	
	0 1	2 3	4 5		9 10 11	12	13
SURFACE LITTER		nulating in place 2 3	May show slight movement 4 5 6	Moderate movement is apparent, deposited against obstacles 7 8	Extreme movement apparent, large and numerous deposits against obstacles 9 10 11	Very little producti 12	
SURFACE ROCK	distrib fragm move	sent, the pution of ents show no ment caused by or water.	If present, course fragments ahve a truncated appearance or spotty distribution caused by wind or water 3 4 5	If present, fragments have a poorly developed distribution pattern caused by wind or water  6 7 8	If present, surface rock or fragments exhibit some movement and accumulation of smaller fragments behind obstacles	If preser dissecte already	d by rills
PEDESTALLIN G	of peo	sable evidence destalling	Slight pedestalling, in flow patterns 4 5 6	Small rock and plant pedestals occuring in flow patterns 7 8 9	Rocks and plants on pedestals generally evident, plant roots exposed 10 11	Most roots ex	
FLOW PATTERNS	No visable evidence of flow patterns 0 1 2 3		Deposition of particles may be in evidence 4 5 6	Well defined, small, and few with intermittent deposits 7 8 9	Flow patterns contain silt and sand deposits and alluvial fans  10 11 12	Flow pat noticeab deposits	le. May
RILLS	No visable evidence of rills.		Some rills in evidence at infrequent intervals over 10'. 4 5 6	Rills ½" to 6" deep occur in exposed places at approximately 10' intervals.	Rills ½" to 6" deep occur in exposed area at intervals of 5 to 10".	May be provided intervals	
GULLIES	May be present in stable condition. Vegetation on channel bed and side slopes  0 1 2 3		A few gullies in evidence which show little bed or slope erosion. Some vegetation present on slopes.	Gullies are well developed with active erosion along less than 10% of their length. Some vegetation may be present.  7 8 9	Gullies are numerous and well devloped with active erosion along 10-50% of their lengths or a few well developed gullies with active erosion along more than 50% of their length 10 11 12	Sharply incised ( area and over 50	
SITUATION TOTAL							
			-				

Erosion Condition Classes: stable 0-20: Slight 21-40: Moderate 41-60: Critical 61-